NOTES ON THE CATFISH, *SILURUS TRIOSTEGUS* (SILURIDAE) FROM THE EUPHRATES RIVER IN TURKEY.

Erhan ÜNLÜ, Department of Biology, Faculty of Science and Art, University of Dicle, Diyarbakir, and **Ramazan BOZKURT**, Department of Zootechnics, Faculty of Agriculture, University of Harran, Sanliurfa, TURKEY.

Key-words. - Siluridae, *Silurus triostegus*, Turkey, Euphrates river, Geographical distribution.

Silurus triostegus was first described by Heckel (1843) from the Tigris River (Mossul). According to current knowledge the species has subsequently been reported from Euphrates in Syria by Gruvel (1931) and Beckman (1962), from Tigris and Euphrates Rivers in Iraq by Mahdi (1967), and from the lower basin of Euphrates without mentioning the exact location (Kuru, 1987; Demirsoy,1988). According to Kuru (1979), Kosswig caught some specimens of this species from Ceylanpinar (Euphrates basin, Turkey) in 1950, but they were lost subsequently. Recent investigation in this area failed to confirm the existence of this species (Kuru, 1979). In this note the morphological and meristic characterisics of *S. triostegus* from Turkey are reported.

Table I. - Morphometric and meristic data on specimens of *Silurus triostegus* collected in the Euphrates River, Turkey. Minimum (Min.) and maximum (Max.) value, mean and standard deviation (S.D) are given for morphometric characters (n = 16, except those indicated in brackets).

Morphometric data	**Min.**	**Max.**	**Mean**	**S.D**	**Meristic data**	
Total length (TL)	250.0	405.0	336.0	± 49.3	**Dorsal fin**	4
Standard length (SL)	228.0	370.0	306.0	± 45.9	**Pectoral fin**	1 - 12 - 14
Head length (HL)	56.0	93.0	73.0	± 10.4	**Pelvic fin**	1 - 9 - 10
Eye diameter (EW)	5.2	8.0	6.5	± 0.8	**Anal fin**	81 - 86
Body depth (BD)	41.0	87.0	68.0	± 13.8	**Caudal fin**	16 - 17
Interorbital length (IO)	23.0	40.0	32.0	± 4.7	**Branchiostegals**	14 - 15
Predorsal (PrD)	68.0	106.0	94.0	± 10.7	**Gill rakers**	12 - 16
Caudal peduncle depth (CpD)	12.0	16.0	14.5	± 1.3	**Vertebræ [n = 3]**	(16)17 + (52)53 = (69)70
First mandibular barbel length (fMBL)	27.0	46.0	36.0	± 5.7		
Second mandibular barbel length (sMBL) [n = 3]	12.0	18.0	16.0	± 3.2		
Maxillary barbel length (MaxBL)	62.0	98.0	77.0	± 10.8		
TL/SL	1.1	1.1	1.1	± 0.0		
SL/HL	4.0	4.6	4.3	± 0.2		
SL/BD	3.9	5.6	4.6	± 0.5		
HL/EW	9.7	13.3	11.3	± 1.1		
HL/MaxBL	0.8	1.0	0.9	± 0.1		
HL/fMBL	1.7	2.3	2.0	± 0.2		
HU/sMBL	4.1	4.8	4.5	± 0.4		
HL/IO	2.1	2.4	2.3	± 0.1		
MaxBL/fMBL	1.9	2.5	2.2	± 0.2		
SL/CpD	20.9	24.6	22.4	± 1.3		

Cybium 1996, 20(3): 315-317.

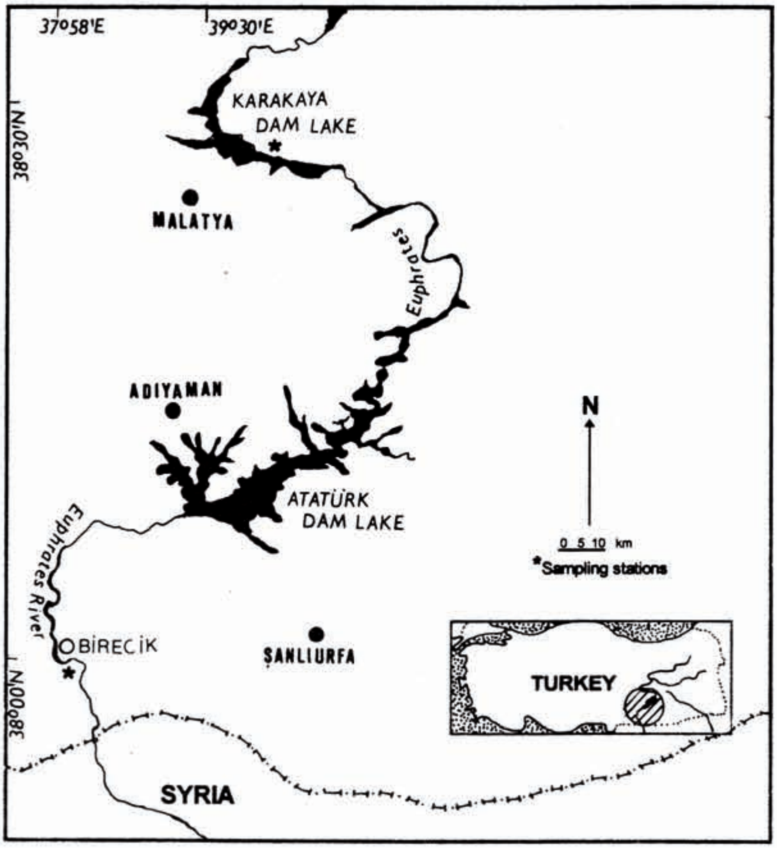

Fig. 1. - Localities from the Euphrates River, Turkey in which *Silurus triostegus* was collected.

Sixteen specimens of *Silurus triostegus* were captured during July-September 1994; thirteen specimens were from the Euphrates River near Birecik, Sanliurfa, and three were from Karakaya Dam Lake on the Euphrates River (Fig. 1). Three specimens were dissected for vertebral counts. Others were preserved in 4% formalin solution. Counts and measurements were carried out according to Lagler *et al.* (1988). Gill raker counts are for the whole, anterior, first arch. Vertebral counts include the uroneural and the Weberian vertebrae. The specimens are kept in the Zoological Museum of the University of Dicle (DUM n° 62).

Meristic and morphometric data are summarized in table I. Dorsal fin rays 4; pectoral fin rays **I**,12-14; pelvic fin rays i, 9-10; anal fin rays 81-86; caudal fin rays 16-17; branchiostegals 14-15; vertebrae (16) 17 + (52) 53 = (69) 70; gill rakers 12-16.

The mouth is large and the lower jaw is considerably longer than the upper jaw; head 4.3 ± 0.2 in standard length; head with 4 mandibular barbels in three specimens, 3 mandibular barbels in one sample, one pair in the others. The existence of specimens with one pair and with two pairs of mandibular barbels has been reported previously (Kobayakawa, 1989). It was reported that the four-barbeled Silurus (sometimes placed in a distinct genus Parasilurus) have 6 barbels when young and that one pair is reabsorbed (Haig, 1952). The maxillary barbels are longer than head; the mandibular barbels shorter. When two pairs of mandibular barbels are present the anterior ones are always shorter than posterior ones (the anterior mandibular barbels in *S. glanis* are longer than posterior ones). The maxillary barbels reach the end of the head whereas the mandibular barbels reach only the middle. The pectoral spine is serrated on its inner surface and with small linear granules on its outer surface. Although vomerine teeth are displayed in two patches, some of our specimens seem to have only a single patch. Kobayakawa (1989) reported two patches of vomerine teeth for *S. triostegus*. Intraspecific variation in respect to vomerine teeth seems to occur throughout the family Siluridae (Haig, 1952). Anal fin is not fused to caudal fin. The caudal fin is rounded. The upper part of the body is mottled pale yellow-brown and black and belly has black spots.

Following dissection of some specimens of *S. triostegus*, the stomach was found to contain *Liza abu* (Mugilidae) (TL = 116 mm) and *Acanthobrama marmid* (Cyprinidae) (TL = 132-135 mm) in their stomach.

Acknowledgements. - We wish to thank to Dr. B. Coad (National Museum of Natural Sciences, Ottawa, Canada) and Dr. M. Kobayakawa (Department of Fisheries Kyushu University, Japan) for their help during this study.

REFERENCES

BECKMAN W.C., 1962. - The freshwater fishes of Syria. *FAO Fish. Biol. Tech. Pap.*, 8: 126-133.

DEMIRSOY A., 1988. - The vertebrates (Anamniota). Vol: 3, Meteksan Press, 930 p. Ankara.

GRUVEL A., 1931. - Les états de Syrie. Richesses marines et fluviales. Exploitation actuelle-Avenir. Bibliothèque de la Faune des Colonies Françaises, 453 p. Paris.

HAIG J., 1952. - Studies on the classification of the catfishes of the Oriental and Palaearctic family Siluridae. *Rec. Ind. Mus.*, 48: 59-116.

HECKEL J.J., 1843. - Abbildungen und Beschreibungen der Fische Syriens, nebst einer neuen Classification und Charakteristik samtlicher Battungen der Cyprinen. 258 p. Stuttgart.

KOBAYAKAWA M., 1989. - Systematic revision of the catfish genus *Silurus*, with description of a new species from Thailand and Burma. *Jap. J. Ichthyol.*, 36(2): 155-186.

KURU M., 1979. - The freshwater of South-Eastern Turkey-2 (Euphrates-Tigris System). *Hacettepe Bull. Nat. Sci. Eng.*, 7(8): 105-114.

KURU M., 1987. - The Vertebrates. No 3, 887 p., Pub. Univ. Ataturk, Erzurum.

LAGLER K.F., BARDACH J.E., MILLER R.R. & D.R. MAY PASSINO, 1981. - Ichthyology. 506 p. John Wiley & Sons, New York, Santa Barbara, London, Sydney, Toronto.

MAHDI N., 1967. - Fishes of Iraq. 82 p. Ministry of Education, Bagdad.

Reçu le 16.10.1995.
Accepté pour publication le 20.03.1996.